Sharkfin Multi-band Roof Mount Antennas

The Sharkfin antennas provide multi-band omnidirectional coverage in an attractive, low profile housing. The tri-band and quad-band models also provide GPS navigation support capability. Their low profile through-hole footprint offers an attractive antenna design that provides optimal sealing for leakage resistance.

Features

- Low, aerodynamic profile eliminates wind noise commonly experienced with external mount vehicular applications
- Overmolded gasket design provides optimal sealing from condensation and water ingress
- Integrated antenna mast design provides secure installation to the vehicle
- UV stability for outdoor applications
- GPS navigation support on select models

Multi-band Antenna Electrical Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Operating Frequencies</th>
<th>Antenna Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPSQB and GPSTB</td>
<td>824-896 MHz (AMPS); 1850-1990 MHz (PCS); 2.4-2.5 GHz (WiFi) (GPSQB only)</td>
<td>Unity</td>
</tr>
<tr>
<td>GPSQBE</td>
<td>870-960 MHz (GSM); 1710-2170 MHz (3G)</td>
<td>Unity</td>
</tr>
<tr>
<td>GPSDBHF</td>
<td>2.4 GHz-2.5 GHz (Wi-Fi); 4.9-5.9 GHz (Public Safety/WiMAX)</td>
<td>Unity</td>
</tr>
</tbody>
</table>

Multi-band Antenna Technical Data

Maximum Power:
- 10 watts (all models, except GPSDBHF)
- 5 watts (GPSDBHF)

Polarization (GPS Models):
- Right hand circular

Input Impedance:
- 50 ohms

VSWR:
- < 1.8:1 (GPS)
- < 2.0:1 (RF)

Grounding Protection:
- DC grounded (GPSDBHF only)

Housing:
- Black, UV protected ABS

Housing Dimensions (major axis x minor axis x height):
- 97 mm (3.8") x 60 mm (2.4") x 70 mm (2.8")

Cable:
- 10 ft RG-174 (all models except GPSDBHF)
- 12 ft Pro-Flex™ Plus 195, black (GPSDBHF)

Mount Method:
- Through hole mounting

Low Noise Amplifier Specifications

<table>
<thead>
<tr>
<th>Operating Frequency</th>
<th>Nominal Gain</th>
<th>Nominal Impedance</th>
<th>Output VSWR</th>
<th>Noise Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1: 1575.42 MHz</td>
<td>24 dB @ 5V</td>
<td>50 ohms</td>
<td>&lt; 1.8:1</td>
<td>2.0 dB nominal / 1.8 dB typical including front filter</td>
</tr>
</tbody>
</table>

Polarization
- Right-hand circular

DC Voltage
- 2.7-5V

Out-of-band Rejection
- ≥ 35 dB fo -50 MHz
- ≥ 40 dB fo +50 MHz

Current Draw
- 35 mA typical

OIP3
- 24 dBm

Environmental Specifications

- Operating Temperature Range: -40° C to +85° C
- Humidity Rating: 95%

*To order, please follow the following part number configuration:

Example: GPSQBE

<table>
<thead>
<tr>
<th>Base Model</th>
<th>GPS Connector Code</th>
<th>AMPS/PCS Connector Code</th>
<th>Wi-Fi Connector Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose among:</td>
<td>Choose among:</td>
<td>Choose among:</td>
<td>Choose among:</td>
</tr>
<tr>
<td>GPSQBE</td>
<td>Right angle SMB Plug (RASBI)</td>
<td>Male SMA (MSMA)</td>
<td>Reverse Polarity TNC (RPC)</td>
</tr>
<tr>
<td></td>
<td>Male SMA (MSMA)</td>
<td>Female TNC (FC)</td>
<td>Male TNC (C)</td>
</tr>
<tr>
<td></td>
<td>Female FME (FFME)</td>
<td>Female TNC (FC)</td>
<td>Reverse Polarity Male SMA (RPMMSM)</td>
</tr>
</tbody>
</table>

*** NOTE: Model GPSDBHF includes a single pigtail terminated with Reverse Polarity, Reverse Threaded Male SMA plug. Call factory for other connector options. This model does not include GPS.